

Project Operating Plan – Energy Technology Engineering Center (ETEC) Recovery Act Project

Energy Technology Engineering Center Recovery Act Project

BACKGROUND

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|-------------------------------------|---|
| Recovery Act Project: | ETEC Recovery Act Project |
| TAFS: | 89-09/10-0335 |
| Project Identification Code: | 2002020 |
| Recovery Act Bill Reference: | PL 111-5 Title IV – Energy and Water Development, Non-Defense Environmental Clean- Up (H.R. 1-25) |
| Project Cost: | \$51,675,000 |
| Budget Authority: | 05949, FE.01.11.00.0 - (Radioactive Site Characterization Survey) 05949, FE.01.18.00.0 - (Soil and Groundwater Remediation) |
| Program Office: | Environmental Management (EM) |
| Recovery Program Plan: | EM - Non-Defense |
| Management Office: | Small Sites Office – Oakland Projects Office ETEC Federal Project Director – Thomas Johnson thomas.johnson@emcbc.doe.gov (818)466-8959 |

LEADS

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|------------------------|-------------------------------------|
| Implementation: | Small Sites/Oakland Projects Office |
| Breakthrough: | N/A |
| Laboratory: | N/A |

I. SUMMARY & OBJECTIVES

Summary: There are two sub-projects that will be completed with Recovery Act funds at the Energy Technology Engineering Center: 1) a Congressionally mandated Area IV-wide radiological characterization and survey (Rad Survey); and 2) supplemental funding of the ongoing investigation and remediation of soil and groundwater contamination.

Rad Survey (CBC-ETEC-0040.R1.1): The FY2008 DOE Appropriations law (Public Law No. 110-161) directed the Department of Energy (DOE) to enter into an interagency agreement (IA) with the Environmental Protection Agency (EPA) to conduct a joint comprehensive radioactive site characterization of Area IV of the Santa Susana Field Lab (SSFL) (approx. 290 acres). This Recovery Act project and funding provides the resources for the EPA to complete this required characterization survey. When the survey is completed, DOE can then complete the Environmental Impact Statement for remediation of Area IV of the Santa Susana Field Laboratory. Completion of the EIS allows for the remaining facilities to be demolished and soil and groundwater clean-up to be completed. Project completion will eliminate approximately 88,000 ft² of abandoned buildings and allow the site (approximately 90 acres) to be returned to Boeing.

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The Radiological characterization provides the basis for determination of the remaining extent of radiological contamination at the site to ensure we have identified all areas requiring remediation. The project fulfills the Government's responsibility to address nuclear research waste and allows earlier completion of legal compliance agreement milestones.

2) Soil and Groundwater Remediation (CBC-ETEC-0040.R1.2): The ongoing site investigation, cleanup and closure work including Resource Conservation and Restoration Act (RCRA) Facility Investigations and RCRA Corrective Action for soil and groundwater Solid Waste Management Units (SWMUs) and Operable Units (OUs) will be supplemented by Recovery Act funding. The California Department of Toxic Substance Control (DTSC) Consent Order interim measures are being implemented to remediate areas of known groundwater contamination, while investigations of potential areas of chemical contamination in the soil at thirteen (13) Solid Waste Management Units (SWMUs) are underway.

The following DOE and EM Strategic Goals tie to this Recovery Act Project:

DOE Strategic Goal 4 – Environmental Responsibility – Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production.

DOE Strategic Goal 5 – Management and Excellence – Enabling the Department's mission through sound management and business practices.

EM Goals – To safely disposition large volumes of nuclear waste; safeguard materials that could be used in nuclear weapons; deactivate and decommission thousands of contaminated facilities no longer needed by the Department to carry on its current mission; EM is fulfilling its commitments to reduce overall risk and complete cleanup across all sites for generations to come.

Deinventory and Demolition Projects: Not applicable. No buildings to be deinventoried or demolished under Recovery Act funding.

Work Scope Changes: There are no work scope changes since the final POP was submitted in September 2009.

Buy Back Work Scope: Not applicable.

Public Benefits: This action will fulfill the Congressional mandate and provide assurance that all aspects of radiological contamination on the site have been identified and will be addressed. It also will help ensure all chemical soil and groundwater contamination has been identified and allow DOE to proceed with environmental clean-up and closure.

Recovery Act Project Impacts: Investment of Recovery Act funds in the Congressionally mandated radiological characterization survey will contribute to

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completion of the EIS which will allow the remaining facilities to be demolished and site soil and groundwater clean-up to be completed. Project completion will result in a footprint reduction (eliminate approximately 88,000 sq ft of abandoned buildings) and allow the site (approximately 90 acres)) to be returned to Boeing. Recovery Act funds are also supporting the ongoing investigation and cleanup work, reducing the agency's environmental impact.

II. COST & SCHEDULE

Budget

Table 1: Budget Implementation Monthly Obligations (actual obligations to contractors for Apr 2009 through Feb 2010 and projected obligations to contractors for Mar 2010 through Sept 2010) (\$M)

The Project funding is subject to re-apportionment and will be finalized by 9/30/2010; the Project Operating Plan will then be reissued with an obligations table.

Table 2: Budget Implementation Actual and Planned Monthly Expenditures (actual costs for Apr 2009 through Feb 2010 and projected costs for Mar 2010 through Sept 2011 and then, if applicable, projected quarterly expenditures in FY2012) (\$M)

The Project funding is subject to re-apportionment and will be finalized by 9/30/2010; the Project Operating Plan will then be reissued with a costs table.

NOTES: The funds provided to EPA via IAG were based on EPA estimate of Rad Survey cost. Soil and GW Remediation Funds have been obligated to Boeing to continue their work on site.

Funds Returned and Offsetting Collections

No funds will be returned or have offsetting collections.

Table 3: Funds Returned and Offsetting Collections (\$M) is not applicable to this project.

Indirect Costs

There are no indirect costs (M&O) associated with this scope of work to be paid by Recovery Act funds.

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Changes to Baseline Budget

Table 4: Changes to Baseline Budgets (\$M)

Not applicable

Milestones for Radiological Characterization Survey

| Milestone Date (ARRA Baseline Date) | Radiological Characterization Survey (CBC-ETEC-0040.R1.1) |
|-------------------------------------|--|
| 9/28/2009 | EPA obtain access to Boeing and DOE historical documents |
| 11/20/2009 | EPA submit draft gamma scanning work plan for stakeholder review |
| 12/21/2009 | Stakeholder meeting to discuss draft field sampling plan |
| 2/22/2010 | EPA Submit final gamma scanning work plan |
| 3/12/2010 | Start Site Mobilization |
| 5/6/2010 | Start Phase 1 Groundwater Sampling |
| 6/1/2010 | Start Quadrant 1 Gamma Scanning |
| 7/20/2010 | Start Soil Sampling |
| 8/18/2010 | Complete Phase 2 Groundwater Sampling |
| 8/24/2010 | Submit Final Historical Site Assessment |
| 10/11/2010 | Complete Quadrant 2 Gamma Scanning |
| 11/10/2010 | Complete Phase 3 Groundwater Sampling |
| 1/3/2011 | Complete Quadrant 3 Gamma Scanning |
| 2/16/2011 | Complete Phase 4 & all Groundwater Sampling |
| 3/28/2011 | Complete Quadrant 4 & all Gamma Scanning |
| 5/12/2011 | Complete Collection of Soil Samples |
| 8/18/2011 | Submit draft quadrant 4 SSR to stakeholders |
| 10/17/2011 | Submit Final Radiological Sampling Report |

Milestones for Soil and Groundwater Remediation

| Milestone Date (ARRA Baseline Date) | Soil and Groundwater Remediation (CBC-ETEC-0040.R1.2) |
|-------------------------------------|---|
| 11/25/2009 | Submit FY09 Annual GW Monitoring Reports |
| 12/15/2009 | Submit draft CFOU RFI Report to DTSC |
| 3/14/2010 | Submit 4Q09 Groundwater Monitoring Report |
| 6/14/2010 | Submit 1Q10 Groundwater Monitoring Report |
| 6/30/2010 | Submit Annual NESHAPs Report |

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| 7/15/2010 | Submit Annual Site Environmental Report |
| 9/14/2010 | Submit 2Q10 Groundwater Monitoring Report |
| 10/1/2010 | RMHF Permit for FY11 |
| 12/14/2010 | Submit 3Q10 Groundwater Monitoring Report |
| 3/14/2011 | Submit 4Q10 Groundwater Monitoring Report |
| 6/14/2011 | Submit 1Q11 Groundwater Monitoring Report |
| 6/30/2011 | Submit Annual NESHAPs Report |
| 7/15/2011 | Submit Annual Site Environmental Report |
| 9/14/2011 | Submit 2Q11 Groundwater Monitoring Report |

NEPA Compliance: The scope of work is addressed in an existing categorical exclusion determination (4/02/09). The NEPA Compliance Officer will monitor implementation and, as necessary, determine whether additional NEPA review is required.

Table 5: Delivery Schedule for Capital Asset Projects is not applicable as both projects have been designated as Operations projects and not Capital Asset projects.

NOTES: This radiological characterization survey scope is being managed by another federal agency (EPA) and not DOE-EM so DOE will not control the work. The current conceptual design phase cost and schedule is considered reasonable however this site has extensive stakeholder involvement that could potentially add schedule risk. If the radiological characterization survey is delayed, then this would delay completion of the EIS which in turn would delay the facility D&D and closure of the site.

The Soil and GW Remediation Recovery Act Scope is based on the previously validated near-term baseline which will be transferred to Recovery Act.

III. PERFORMANCE

Performance Measures

Table 6a: Project Performance Targets

| | |
|---|---|
| Recovery Act Project Identification Code | 2002020 |
| Linkage To S-1 Priorities | National Security and Legacy – This survey is congressionally mandated and is necessary to complete the EIS which is necessary to complete legacy clean-up and closure of the site. |
| Linkage to Current Program Goal (if applicable) | DOE Strategic Goal 4 – Environmental Responsibility – Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production. EM Strategic Goals – To safely disposition large volumes of nuclear waste; safeguard |

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| | <p>materials that could be used in nuclear weapons; deactivate and decommission thousands of contaminated facilities no longer needed by the Department to carry on its current mission; EM is fulfilling its commitments to reduce overall risk and complete cleanup across all sites for generations to</p> <p>The Rad Characterization Survey sub-project will allow for the site's EIS to be completed, which will eventually lead to the completion of facility decommissioning and soil and groundwater cleanups.</p> <p>The Soil and GW Remediation sub-project work will supplement the Base Program budget through FY11 allowing use of base funds for settlement of litigation costs and anticipated increase of costs for compliance with SB990.</p> |
| ARRA Overall Performance Measure | Dispose of 25 m ³ of LLW |
| First Year Performance Target | Rad Survey plans and contracting confirmed. Final RFI begun for Groups 1A and 10. |
| Q3 – Project-Level Quarterly Performance Milestone(s) | DOE and EPA agree on reporting requirements and approach. |
| Q4 – Project-Level Quarterly Performance Milestone(s) | EPA Contractor completes the Historical Site Assessment Plan. Start final versions of RI for Groups 1A, 10 |
| Second Year Performance Target | Dispose of 10 m ³ of LLW |
| Q1 - Project-Level Quarterly Performance Milestone(s) | No shipments this quarter |
| Q2 - Project-Level Quarterly Performance Milestone(s) | No shipments this quarter |
| Q3 - Project-Level Quarterly Performance Milestone(s) | No shipments this quarter |
| Q4 - Project-Level Quarterly Performance Milestone(s) | 10 m ³ |
| Third Year Performance Target | Dispose of 15 m ³ of LLW |
| Q1 - Project-Level Quarterly Performance Milestone(s) | No shipments this quarter |
| Q2 - Project-Level Quarterly Performance Milestone(s) | No shipments this quarter |

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| Q3 - Project-Level Quarterly Performance Milestone(s) | No shipments this quarter |
| Q4 - Project-Level Quarterly Performance Milestone(s) | 15 m ³ |

Table 6b. Radiological Characterization Survey Detailed ARRA-Specific Project Performance Measures and Targets are not applicable as the EPA Rad Survey work does not fall within any of the defined Performance Measures.

Table 6c. Soil and Groundwater Remediation Detailed ARRA-Specific Project Performance Measures and Targets

| Soil and Groundwater Remediation (CBC-ETEC-0040.R1.2) | | | | | | | | | | | | |
|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--------------------------------|-------------------------|
| | FY 2009 Q3 Target | FY 2009 Q4 Target | FY 2010 Q1 Target | FY 2010 Q2 Target | FY 2010 Q3 Target | FY 2010 Q4 Target | FY 2011 Q1 Target | FY 2011 Q2 Target | FY 2011 Q3 Target | FY 2011 Q4 Target | FY 2012 Yearly Target | Total ARRA Target |
| LLW Disposed (Legacy and NGW) | | | | | | 10 | | | | 15 | | 25 |

NOTE: Performance of the Rad. Char. Survey, which was a congressional mandate, will allow for the EIS to be completed which in turn will allow completion of D&D and RCRA clean-up. This will allow for DOE-EM to proceed and complete the cleanup for this site. The Soil and GW Remediation work is conducted in compliance with a RCRA consent order.

National Strategic Benefits

Table 7: National Strategic Benefits is not applicable to this project.

NOTES: The same amount of work (and associated carbon emissions and oil consumption) will be done with the Recovery Act funds as was originally planned. Therefore there is no change in mass emissions or consumption attributable to this project.

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IV. MANAGEMENT

Secretarial-level Items

Intended Results and Linkage to Secretary's Priorities

Table 8: Secretary's Priorities

Table 8 depicts the linkages between short term (5 year) qualitative and quantitative benefit estimates and the Secretarial-level Priorities through September 2014.

| Secretary's Priorities | Project Impacts (Qualitative) | Project Impacts (Quantitative) |
|-------------------------------|--|---|
| Science and Discovery | | |
| Clean, Secure Energy | | |
| Economic Prosperity | | |
| National Security and Legacy | Complete Congressionally mandated rad. char. survey to satisfy stakeholder issues. Provides additional characterization of site. Allows for project to continue to site closure and footprint reduction. | Project completion will eliminate approximately 88,000 sq ft of abandoned buildings and allow the site (approximately 90 acres) to be returned to Boeing. |
| Climate Change | | |

Collaboration and Coordination

- The FY2008 DOE Appropriations language mandated that DOE and EPA prepare a radiological characterization survey for SSFL Area IV. DOE and EPA have an interagency agreement where EPA performs this survey and DOE funds it. DOE will continue to work with the stakeholders, congressional delegations, regulators, state, and public during the performance of this work.

Federal Infrastructure Investments

There are no infrastructure investment project activities associated with this Recovery Act Project.

Ancillary benefits may eventually be achieved through the elimination of facilities resulting in reduced electrical power consumption and corresponding reduction of greenhouse gas emissions. Reuse/Recycle of excess materials could result in reduced consumption in fossil fuels required to process raw materials.

These facilities contain hazardous or radiological material. Accelerating the removal and proper disposal reduces risk of releases of this material to the environment.

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Line Management

The existing project controls process will be used to manage, oversee and report on the project. DOE will work with EPA to ensure appropriate project controls are in place for DOE to meet reporting requirements. This Recovery Act project will be tracked and reported independently from the ETEC base program.

Needs from Staff Offices

1) Human Capital

Table 9: Information on Hiring Under the Recovery Act is not applicable for this project.

Note: No additional Federal staff positions are anticipated to be needed for this project. There is no use of temporary and TERM appointments, details from other Federal agencies, M&O contractors, use of IPA assignments from state/local governments and laboratories, student hires, excepted service (EJ) authority, SES limited TERM, non-competitive authorities anticipated to be needed for this project. DOE Oakland Projects Office will use support from the Consolidated Business Center and/or support service contractors to provide limited augmentation to the local federal staff.

2) Procurement

Table 10: Procurement Plans

| Activity | Type | New/Exist (N/E) | Changes (E), Needs (N) | Status | Expected Complete | Issues (Y/N) |
|------------------------------|-----------------------|------------------------|--|---------------|--------------------------|---------------------|
| Rad. Char. Survey DOE/EPA | Interagency Agreement | Exist | (E) Language modifications | Completed | Done | N |
| Rad. Char. Survey Contractor | Contracts | New | (N) Prepare contract to hire contractor to perform survey – By EPA | Completed | Done | N |
| Soil and GW Rem. | Contracts | Exist | (E) Language modifications | Completed | Done | N |

NOTES: This rad survey contractor procurement action will be performed by EPA. The Soil and GW Remediation is part of a contract renewal with Boeing.